Water Quality Division
RULE CLARIFICATION

RC #: 007	**Title:** 18	**Chapter:** 9	**Article:** 3	**Rule Citation:** R18-9-A310(F)(3)(c)

Date Issued: 2/21/01	**Withdrawn or Superceded? No X Yes __ Date:**

Topic of Rule Needing Clarification: Seepage pit performance testing

Text of Rule Needing Clarification:

R18-9-A310(F)(3)(c): "Measure the decline of the water level continually until three consecutive 10-minute measurements indicate that the infiltration rates are within 10%. If measurements indicate that infiltration is not approaching a steady rate or if the rate is close to a numerical limit specified in R18-9-A312(E), an alternate method based on a graphical solution of the test data shall be used to approximate the final stabilized infiltration rate."

Question Needing Clarification:

How is the infiltration rate derived by the procedure described above converted to a Soil Absorption Rate (SAR) to determine the minimum sidewall area of a seepage pit using the equation specified in R18-9-E302(C)(5)(k)?

Clarification of Rule:

The stabilized infiltration rate for a seepage pit determined by the test hole procedure specified in R18-9-A310(F)(3)(c) is used in the following formula to determine an equivalent percolation test rate*:

$$P = (15 / D_S) \times I_S$$

where $P =$ Percolation test rate (minutes per inch) tabulated in the first column of the table in R18-9-A312(D)(2)(a).

  $D_S =$ Diameter of the seepage pit test hole (inches).

  $I_S =$ Seepage pit stabilized infiltration rate (minutes per inch) determined by the procedure specified in R18-9-A310(F)(3)(c).

Once P is determined, the designer shall use columns one and two of the table in R18-9-A312(D)(2)(a) to establish the design SAR for wastewater treated by a General Permit 4.02 septic tank and to calculate the required minimum sidewall area for the seepage pit using the equation specified in R18-9-E302(C)(5)(k). The note at the bottom of the table is also applicable to seepage pits.

*The formula is derived by equating sidewall fluxes for both testing methods.